

PRECISE PT1000 UNIVERSAL THERMOMETER



SEE ALSO: G 1710, G 1720, G 1730 WITH
PERMANENTLY ATTACHED SENSOR

HIGHLIGHTS:

- Modern and functional housing
- 3 line display / overhead display at the push of a button
- Backlit
- Alarm function
- Waterproof (IP65 / IP67)
- Robust, long battery life



connection

G 1700

Item No. 609826

Waterproof alarm thermometer for BNC interchangeable sensors, device loose, without temperature sensor

G1700-GKK1000

Item No. 479238

Waterproof alarm thermometer for BNC interchangeable sensors, device in case GKK 1000, without temperature sensor

G1700-WPT3

Item No. 479237

Waterproof alarm thermometer for BNC interchangeable sensors, device in case GKK 1000, immersion sensor GF1T-T3-AA-BNC, ISO calibration certificate WPT3 -20/0/70 °C

GENERAL:

When developing the new G 1000 series, the focus was consciously on the essential functions of the measurement technology. Measurement with a focus on precision, speed, and reliability, packed into a compact housing, delivers an outstanding price/performance ratio, Made in Germany.

The new portable instruments also have an impressive ergonomic design, are dust- and water-proof to IP 65/67, and feature a backlit display.

The compact thermometer is equipped with a practical BNC connection for interchangeable sensors. The device redefines our entry-level measurement technology – including a test report.

APPLICATIONS:

Precise measurements in liquids and air, for measuring core temperatures (with insertion probe); laboratories, quality assurance, service, food, ...

TECHNICAL SPECIFICATIONS:

Measuring range:	-200.0 .. + 450.0 °C (-328.0 .. + 842.0 °F) with plug-in sensor (observe the sensors approved range of application!)
Accuracy (device): (at nominal temperature = 25 °C)	-20 .. + 100 °C: $\pm 0.1 \text{ K} \pm 1 \text{ digit}$ otherwise 0.1 % of reading $\pm 2 \text{ digits}$
Working conditions:	-20 .. + 50 °C; 0..95 % RH (not condensing)
Display:	3-line with battery level indicator, backlit, protected by break-resistant pane, overhead display at the push of a button
Power supply:	2 x AA batteries, > 5000 h running time
Sensor:	Pt1000 2-wire with BNC connection can be used
Protection class:	IP65 / IP67 (only with sensors marked as waterproof when plugged in)
Housing:	break-proof ABS housing
Dimensions:	108 x 54 x 28 mm (H x W x D) without sensor connection
Weight:	130 g (without probe)
Scope of delivery:	Device, test report, 2 x batteries, operating instructions

ACCESSORIES OR SPARE PARTS:**GF 1T-T3-B-BNC**

Item No. 609549

compact Pt1000 handheld sensor with silicone handle, immersion sensor $\varnothing 3 \text{ mm}$ Pt1000 class B, with BNC plug

GF 1T-E3-B-BNC

Item No. 609639

compact Pt1000 handheld sensor with silicone handle, insertion sensor $\varnothing 3 \text{ mm}$ Pt1000 class B, with BNC plug,

GF 1T-E1.5-B-BNC

Item No. 609645

compact Pt1000 handheld sensor with silicone handle, insertion sensor $\varnothing 1.5 \text{ mm}$ extra thin, Pt1000 class B, with BNC plug,

GKK 1000

Item No. 611603

Case for G1000 series / temperature with cut-outs for 1 device of the G 1xxx series 235 x 185 x 48 mm (W x H x D)

ST-G1000

Item No. 611373

G 1000 protective bag made of Nappa leather, a universal cutout for sensors, belt clip

GB AA

Item No: 610049

Replacement battery mignon (AA) 1.5 V (2 pieces are required)



SUITABLE PT1000 SENSORS (2-WIRE)

ACCURACIES PT1000:

Sensor accuracy according to DIN EN 60751

DIN class B: (validity range: -50 .. + 500 °C)

± 0.3 °C at 0 °C

DIN class A: (validity range: -30 .. + 300 °C)

± 0.15 °C at 0 °C

DIN class AA = 1/3 DIN class B: (Validity range: 0 .. + 150 °C)

± 0.1 °C at 0 °C

SURCHARGES FOR SPECIAL DESIGNS:

(DESIGN-RELATED VARIATIONS ARE AVAILABLE)

longer sensor tube:

surcharge per additional 100 mm or part thereof

longer sensor cable (PVC):

surcharge per additional 1 m or part thereof

Spiral cable, approx. 1.5 m stretched PUR**other sensor cable material on request.****Sensor tube with teflon shrinkage**

(for temperature sensors up to 200 mm)

(for measurements in acids and sea water, max. measuring range = 250 °C)

Sensor handle waterproof encapsulated

(only possible with PVC cable -20 .. + 105 °C)

higher sensor accuracy:

DIN class AA, for Pt1000, tolerances: 0.1 °C at 0 °C

higher sensor accuracy:

1/10 DIN class B, for Pt100 sensors, tolerances: 0.03 °C at 0 °C

Handling fee for custom-made products**Handling fee for custom-made GF1T/GF2T/GF3T**

All sensor designs are also available as Pt100 2- / 3- or 4-wire on request.

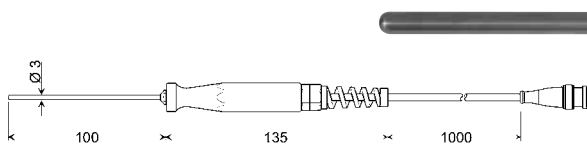
We manufacture sensors according to your requirements and ideas at short notice and at a reasonable price. Please inquire.

-70 °C
+250 °C**GTF 175-BNC**

Item No. 607165

Immersion sensor for liquids/gases

-70 .. + 250 °C, Pt1000 class B



Corrosion-resistant V4A tube Ø 3 mm, plastic handle, anti-kink screw connection, 1 m highly flexible silicone cable, BNC plug

Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

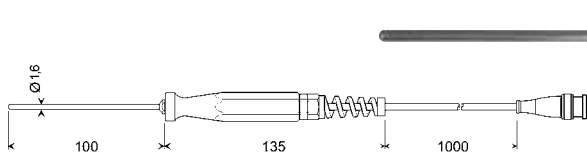
Advantages of the sheathed element Pt1000:

- high temperature resistance
- sheathed tube is bendable
- high shock resistance
- long lifetime

-70 °C
+250 °C**GTF 175/1.6-BNC**

Item No. 611323

Immersion probe with sheathed element Pt100 -200 .. + 600 °C, DIN class B



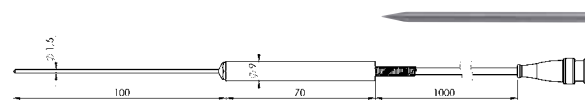
V4A sheathed tube, bendable, Ø 1.6 mm, plastic handle, anti-kink screw connection, 1 m highly flexible silicone cable, BNC plug

Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 25 s-200 °C
+250 °C**GES 20-TB-BNC**

Item No. 607377

Core temperature / food probe, compact teflon handle

-200 .. + 250 °C, Pt1000 class B



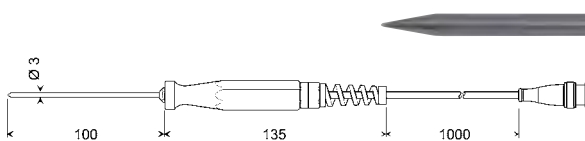
V4A tube with Ø 1.5 mm slim insertion tip, small teflon handle, stainless steel kink protection, 1 m teflon cable, BNC plug

Response time T_{90} : Water 0.4 m/s < 1 s, air 2 m/s approx. 12 s-70 °C
+250 °C**GES 175-BNC**

Item No. 611324

Insertion probe for soft plastic media

-70 .. + 250 °C, Pt1000 class B



V4A tube Ø 3 mm with needle-shaped insertion tip, plastic handle, anti-kink screw connection, 1 m highly flexible silicone cable, BNC plug

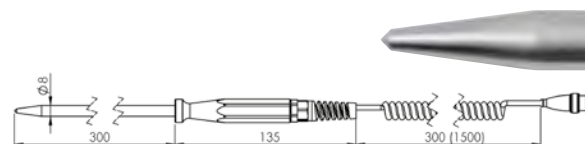
Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s-50 °C
+250 °C**GES200-T-300-D8-L1.5PU**

Item No. 479239

Robust insertion probe

-50 .. + 250 °C, Pt1000 class B

NEW!



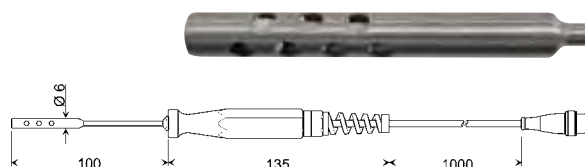
Stainless steel tube Ø 8 mm with insertion tip, plastic handle, anti-kink screw connection, spiral cable (approx. 1.5 m stretched), BNC plug, for use in soils, bulk goods, asphalt, etc.

Response time T_{90} : Water 0.4 m/s approx. 4 s-70 °C
+250 °C**GLF 175-BNC**

Item No. 607162

Air / gas sensors for clean media

-70 .. + 250 °C, Pt1000 class B



(use GTF175 for contaminated media), punched V4A protection tube, rapid response Pt1000 miniature sensor freely arranged behind it, thus high response speed, plastic handle, anti-kink fitting, 1 m highly flexible silicone cable, BNC plug

Response time T_{90} : Air 2 m/s approx. 15 s

SUITABLE PT1000 SENSOR (2-WIRE)

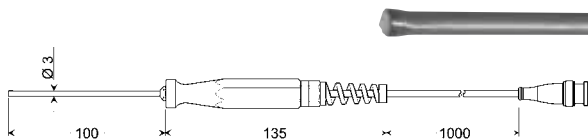
-70 °C
+250 °C

GOF 175-BNC

Item No. 607163

Surface probe for solid surfaces

-70 .. + 250 °C, Pt1000 class B



Front-side Pt1000 ceramic plate 2 x 2.3 mm, V4A sensor tube at the front 3 x 3 mm square, plastic handle, anti-kink screw connection, 1 m highly flexible silicone cable, BNC plug

Response time T_{90} : approx. 15 s

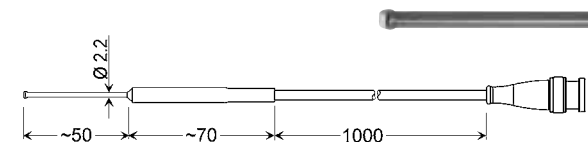
-70 °C
+120 °C

GOF 175 Mini-BNC

Item No. 610399

Surface probe for solid surfaces

-70 .. + 120 °C, Pt1000 class B



Pt1000 ceramic plate on the face, 2 x 2.3 mm, V4A tube Ø 2.2 mm, 1 m highly flexible silicone cable, BNC plug

Response time T_{90} : approx. 15 s

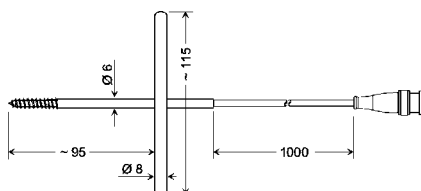
-70 °C
+250 °C

GGF 175-BNC

Item No. 610397

Probe for deep-frozen products

-70 .. + 250 °C, Pt1000 class B



For screwing into frozen food, etc. without pre-drilling, V4A pipe Ø 6 mm with screw tip, 1 m highly flexible silicone cable, BNC plug

Response time T_{90} : approx. 15 s

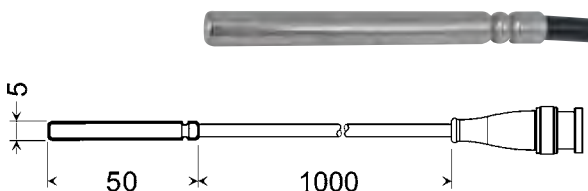
-50 °C
+200 °C

GTF 2000-BNC

Item No. 607164

Air- / tube mounting probe

-50 .. + 200 °C, Pt1000 class B



V4A sensor sleeve Ø 5 mm, 1 m highly flexible silicone cable, BNC plug, every additional meter or part thereof surcharge: € 3.20

Response time T_{90} : Water 0.4 m/s < 10 s, air 2 m/s approx. 60 s**VARIANT:****GTF 2000-BNC-WD**

Item No. 476007

Watertight design, sensor design as above, but cable made of PVC and sensor tube shrink-wrapped in a watertight manner. Max. 105 °C!

**HIGHLIGHTS:**

- Lightweight, handy handle with optimized ergonomics and flexible cable
- Water-resistant: can be completely submerged
- Temporary temperature resistance up to 250 °C

-70 °C
+250 °C

GF 1T-T3-B-BNC

Item No. 609549

compact Pt1000 handheld sensor with silicone handle

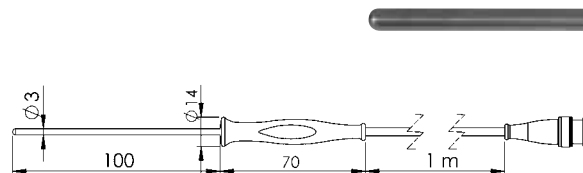
-70 .. + 250 °C, Pt1000 class B

GF 1T-T3-AA-BNC

Item No. 609550

compact Pt1000 handheld sensor with silicone handle

-70 .. + 250 °C, Pt1000 class B



Immersion tip Ø 3 mm made of V4A tube, black silicone handle -50 .. + 250 °C, 1 m silicone cable -50 .. + 230 °C permanent / +250 °C 2 h, probe tip and silicone handle IP67, BNC connector

Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s**VARIANTS:****GF 1T-T3-B-LE**

Item No. 609547

Pt1000 handheld sensor, Pt1000 class B, with loose ends

GF 1T-T3-AA-LE

Item No. 609548

Precision Pt1000 handheld sensor, Pt1000 Kl. AA, with loose ends

-200 °C
+250 °C

GF 1T-T3-B-BNC-MB4

Item No. 611763

Pt1000 handheld sensor for low temperatures, -200 .. + 250 °C, Pt1000 class B

SUITABLE PT1000 SENSOR (2-WIRE)

-70 °C
+250 °C

GF 1T-E3-B-BNC

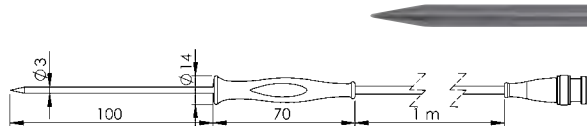
Item No. 609639

Insertion sensor, Ø 3 mm, -70 .. + 250 °C, Pt1000 class B

GF 1T-E3-AA-BNC

Item No. 609640

Insertion sensor, Ø 3 mm, -70 .. + 250 °C, Pt1000 class AA



Insertion probe Ø 3 mm made of V4A tube, black silicone handle -50 .. + 250 °C, 1 m silicone cable -50 .. + 230 °C permanent / +250 °C 2 h, probe tip and silicone handle IP67, BNC plug

Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

VARIANTS:**GF 1T-E3-B-LE**

Item No. 609637

Pt1000 insertion probe, Pt1000 class B with loose ends

GF 1T-E3-AA-LE

Item No. 609638

Precision Pt1000 insertion probe Pt1000 class AA with loose ends

-70 °C
+250 °C

GF 1T-E1.5-B-BNC

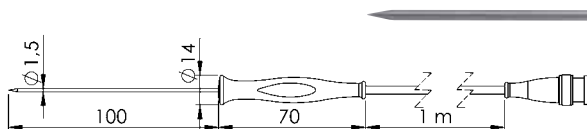
Item No. 609645

extra thin insertion probe, Ø 1.5 mm, -70 .. + 250 °C, Pt1000 class B

GF 1T-E1.5-A-BNC

Item No. 609646

extra thin insertion probe, Ø 1.5 mm, -70 .. + 250 °C, Pt1000 class A



Insertion probe Ø 1.5 mm made of V4A tube, black silicone handle -50 .. + 250 °C, 1 m silicone cable -50 .. + 230 °C permanent / +250 °C 2 h, probe tip and silicone handle IP67, BNC plug

Response time T_{90} : Water 0.4 m/s < 1 s, air 2 m/s approx. 12 s

VARIANTS:**GF 1T-E1.5-B-LE**

Item No. 609643

extra thin Pt1000 insertion probe, Pt1000 class B, with loose ends

GF 1T-E1.5-A-LE

Item No. 609644

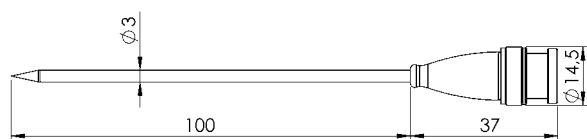
extra thin Pt1000 insertion probe, Pt1000 class A, with loose ends

-70 °C
+250 °C

GF 2T-E3-B-BNC

Item No. 609926

Pt1000 insertion probe, BNC plug, without cable -70 .. + 250 °C, Pt1000 class B



Insertion probe Ø 3 mm made of V4A tube, IP67 when plugged in, BNC plug with EPDM grommet up to +75 °C

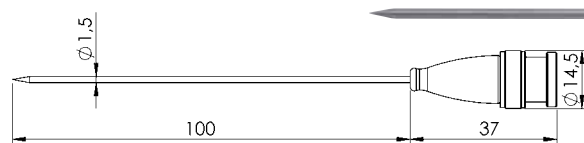
Response time T_{90} : Water 0.4 m/s < 2 s, air 2 m/s approx. 40 s

-70 °C
+250 °C

GF 2T-E1.5-A-BNC

Item No. 609824

Pt1000 insertion probe, BNC plug, without cable, -70 .. + 250 °C, Pt1000 class A



Insertion probe Ø 1.5 mm made of V4A tube, IP67 when plugged in, BNC plug with EPDM grommet up to +75 °C

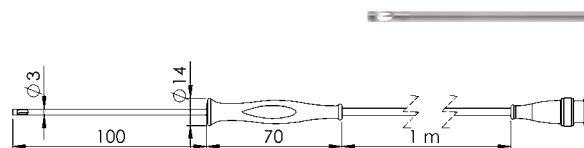
Response time T_{90} : Water 0.4 m/s < 1 s, air 2 m/s approx. 12 s

-70 °C
+250 °C

GF 1T-L3-B-BNC

Item No. 611297

Pt1000 air probe for clean media, -70 .. + 250 °C, Pt1000 class B



(use GF 1T-T3 for dirty media), perforated V4A tube Ø 3 mm, quick-acting Pt1000 freely arranged, black silicone handle up to +250 °C, 1 m silicone cable up to +230 °C continuously / +250 °C 2 h, BNC connector

Response time T_{90} : Air 2 m/s approx. 15 s

VARIANTS:**GF 1T-L3-B-LE**

Item No. 611298

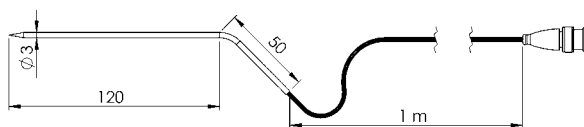
Pt1000 air probe, Pt1000 class B, with loose ends

-70 °C
+400 °C

GF 3T-E3-BNC

Item No. 611301

Grill probe up to max 400 °C, -70 .. + 400 °C, Pt1000 class B



insertion probe Ø 3 mm bent from V4A tube, 1 m glass-silk-insulated cable with stainless steel braiding up to +350 °C continuously / +400 °C 2 h, BNC plug

Response time T_{90} : Water 0.4 m/s approx. 10 s, air 2 m/s approx. 40 s

VARIANTS:**GF 3T-E3-B-LE**

Item No. 611302

Pt1000 grill probe, Pt1000 class B, with loose ends